

Ki-67 Monoclonal Antibody (SolA15), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Dog, Cynomolgus monkey, Human, Mouse, Non-human primate, Rat
Published Species	Rat, Mustelid, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	SolA15
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10854564

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	90 Publications
Immunohistochemistry (Paraffin) (IHC (P))	2.5-5 µg/mL	13 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	5 µg/mL	6 Publications
Immunocytochemistry (ICC/IF)	5 µg/mL	52 Publications
Flow Cytometry (Flow)	-	74 Publications

Product Specific Information

Description: The monoclonal antibody SolA15 recognizes mouse and rat Ki-67, a 300 kDa nuclear protein. Ki-67 is present during all active phases of the cell cycle (G1, S, G2, and mitosis), but is absent from resting cells (G0). Ki-67 is detected within the nucleus during interphase but redistributes to the chromosomes during mitosis. Ki-67 is used as a marker for determining the growth fraction of a given population of cells. In studies of tumor cells, the "Ki-67 labeling index" refers to the number of Ki-67 positive cells within the population and this is used to predict outcome of particular cancer types. Ki-67 has been shown to interact with the DNA-bound protein chromobox protein homolog 3 (CBX3) (heterochromatin).

The SolA15 antibody also recognizes human, non-human primate and canine Ki-67.

Applications Reported: This SolA15 antibody has been reported for use in immunohistochemical staining of formalin-fixed paraffin embedded (FFPE) tissue sections and frozen (paraformaldehyde fixed) sections and immunocytochemistry (ICC).

Applications Tested: This SolA15 antibody has been tested by immunohistochemistry on formalin-fixed paraffin embedded mouse skin with high or low pH antigen retrieval and immunocytochemistry on fixed and permeabilized C2C12 cells at less than or equal to 5 µg/mL. It is recommended that this antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

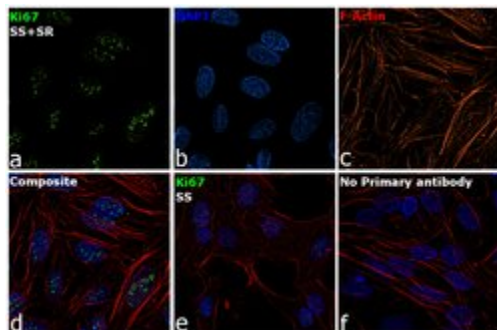
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data

Ki-67 Antibody (14-5698-82)

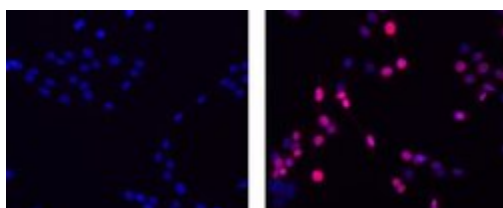
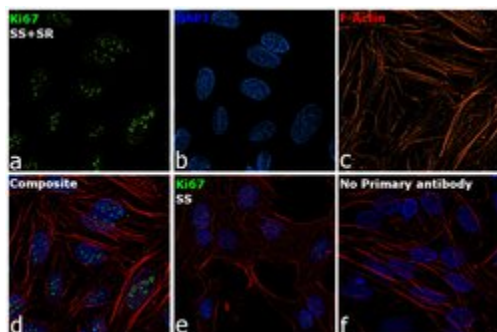
Immunofluorescence analysis of Ki67 was performed using 70% confluent log phase HeLa cells serum starved for 36 Hrs followed by serum release for 6 Hrs. The cells were fixed with 4% Paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 10 minutes at room temperature. The cells were labeled with Ki-67 Monoclonal Antibody (SolA15), eBioscience™ (Product # 14-5698-82) at 5 µg/ml in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175), (1:2000 dilution) for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415 , 1:300). Panel d represents the merged image showing Cytoplasmic localization. Panel e represents HeLa cells serum starved for 36 Hrs with reduced signal. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification. Cell treatment validation info.



Product Images For Ki-67 Monoclonal Antibody (SolA15), eBioscience™

Ki-67 Antibody (14-5698-82) in ICC/IF

Immunofluorescence analysis of Ki67 was performed using 70% confluent log phase HeLa cells serum starved for 36 Hrs followed by serum release for 6 Hrs. The cells were fixed with 4% Paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 10 minutes at room temperature. The cells were labeled with Ki-67 Monoclonal Antibody (SolA15), eBioscience™ (Product # 14-5698-82) at 5 µg/mL in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 488 (Product # A1-1006, 1:2000 dilution) for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents serum starved cells with reduced signal. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



Ki-67 Antibody (14-5698-82) in ICC/IF

Immunocytochemistry on fixed and permeabilized C2C12 cells using 5 µg/mL of Rat IgG2a Isotype Control (left) or 5 µg/mL of Anti-Mouse/Rat Ki-67 Purified (right) followed by Anti-Rat TRITC. Nuclei are stained with DAPI. Co-expression of Ki-67 and DAPI appears pink.

[View more figures on thermofisher.com](http://thermofisher.com)

Western Blot (1)

eLife

The cell proliferation antigen Ki-67 organises heterochromatin.

"Published figure using Ki-67 monoclonal antibody (Product # 14-5698-82) in Flow Cytometry"

Authors: Sobecki M, Mrouj K, Camasses A, Parisis N, Nicolas E, Lières D, Gerbe F, Prieto S, Krasinska L, David A, Eguren M, Birling MC, Urbach S, Hem S, Déjardin J, Malumbres M, Jay P, Dulic V, Lafontaine DLJ, Feil R, Fisher D

Species
Human
Mouse

Dilution
Not Cited
Not Cited

Year
2016

Immunohistochemistry (90)

Theranostics

Impairment of type H vessels by NOX2-mediated endothelial oxidative stress: critical mechanisms and therapeutic targets for bone fragility in streptozotocin-induced type 1 diabetic mice.

"14-5698 was used in Immunohistochemistry-immunofluorescence to propose that the impairment of type H vessels by NOX2-mediated endothelial oxidative stress might be an important contributor to type 1 diabetes mellitus-induced osteopathy."

Authors: Hu XF, Xiang G, Wang TJ, Ma YB, Zhang Y, Yan YB, Zhao X, Wu ZX, Feng YF, Lei W

Species
Mouse

Dilution
1:200

Year
2021

Journal of cellular and molecular medicine

HIF-1 is necessary for activation and tumour-promotion effect of cancer-associated fibroblasts in lung cancer.

"14-5698-82 was used in Immunohistochemistry, Immunocytochemistry to find that hypoxia-inducible factor-1 (HIF-1) is highly expressed in CAFs of human lung cancer tissues and mouse spontaneous lung tumour."

Authors: Zhang Y, Bian Y, Wang Y, Wang Y, Duan X, Han Y, Zhang L, Wang F, Gu Z, Qin Z

Species
Human

Dilution
Not Cited

Year
2021

[View more IHC references on thermofisher.com](#)

Immunohistochemistry (Paraffin) (13)

Frontiers in oncology

Radiation Induced Metabolic Alterations Associate With Tumor Aggressiveness and Poor Outcome in Glioblastoma.

"Published figure using Ki-67 monoclonal antibody (Product # 14-5698-82) in Immunocytochemistry"

Authors: Gupta K, Vuckovic I, Zhang S, Xiong Y, Carlson BL, Jacobs J, Olson I, Petterson XM, Macura SI, Sarkaria J, Burns TC

Species
Mouse
Not Applicable

Dilution
Not Cited
Not Cited

Year
2020

[View more IHC \(P\) references on thermofisher.com](#)

More applications with references on thermofisher.com

IHC (PFA) (3)

IHC (F) (6)

ICC/IF (52)

Flow (74)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.